

Service Manual

PL-601 Semi-Automatic Turntable

PL-701 Full-Automatic Turntable

Specifications

PL-601

Platter drive system	Belt drive
Insulation	Double floating
Motor	FG servo DC motor
Platter diameter/thickness	12" x 1-3/16"
Platter weight	2.2 lbs.
Platter mat weight	0.6 lbs.
Speed	33 or 45 rpm
Speed adjustment range	± 3%
Wow and flutter	0.035% nominal
S/N	68 dB DIN B nominal
Tone arm effective length	8-15/32"
Overhang	19/32"
Tracking error	less than ± 2°
Recommended stylus pressure	0 - 3g (with cartridge weight 3.5 - 10g) 0 - 2.5g (with cartridge weight 3 - 3.5g)
Recommended cartridge weight	3 - 10g
Headshell	Carbon fibre (removable)
Arm control	Electronic sensing CPU
Sub chassis	Ceramic compound resin (CCR)
AC power requirement	120V 60 Hz
Power consumption	10W
Dimensions	18-1/8" width 6" height with dust cover attached and closed 15-3/8" depth with dust cover closed
Weight	17 lbs 14 oz (8.6 kg)

PL-701

Platter drive system	Belt drive
Insulation	Double floating
Motor	FG servo DC motor
Platter diameter/thickness	12" x 1-3/16"
Platter weight	3.3 lbs.
Platter mat weight	0.6 lbs.
Speed	33 or 45 rpm
Speed adjustment range	± 3%
Wow and flutter	0.03% nominal
S/N	70 dB DIN B nominal
Tone arm effective length	8-15/32"
Overhang	19/32"
Tracking error	less than ± 2°
Recommended stylus pressure	0 - 3g (with cartridge weight 3.5 - 10g) 0 - 2.5g (with cartridge weight 3 - 3.5g)
Recommended cartridge weight	3 - 10g
Headshell	Carbon fibre (removable)
Arm control	Electronic sensing CPU fully automatic
Sub chassis	Ceramic compound resin (CCR)
AC power requirement	120V 60 Hz
Power consumption	10W
Dimensions	18-1/8" width 6" height with dust cover attached and closed 15-3/8" depth with dust cover closed
Weight	18 lbs 15 oz



1. ADJUSTMENT

A. Turntable height adjustment

1. Put the rubber mat and the disc stabilizer on the turntable.
2. Keep the space between the base and the turntable platter $1/8''$ to $5/32''$ (3.0 to 4.0mm) by turning screws 1, 2 and 3 through the holes of the platter.

Note: Turn up the mat when turning the screws.

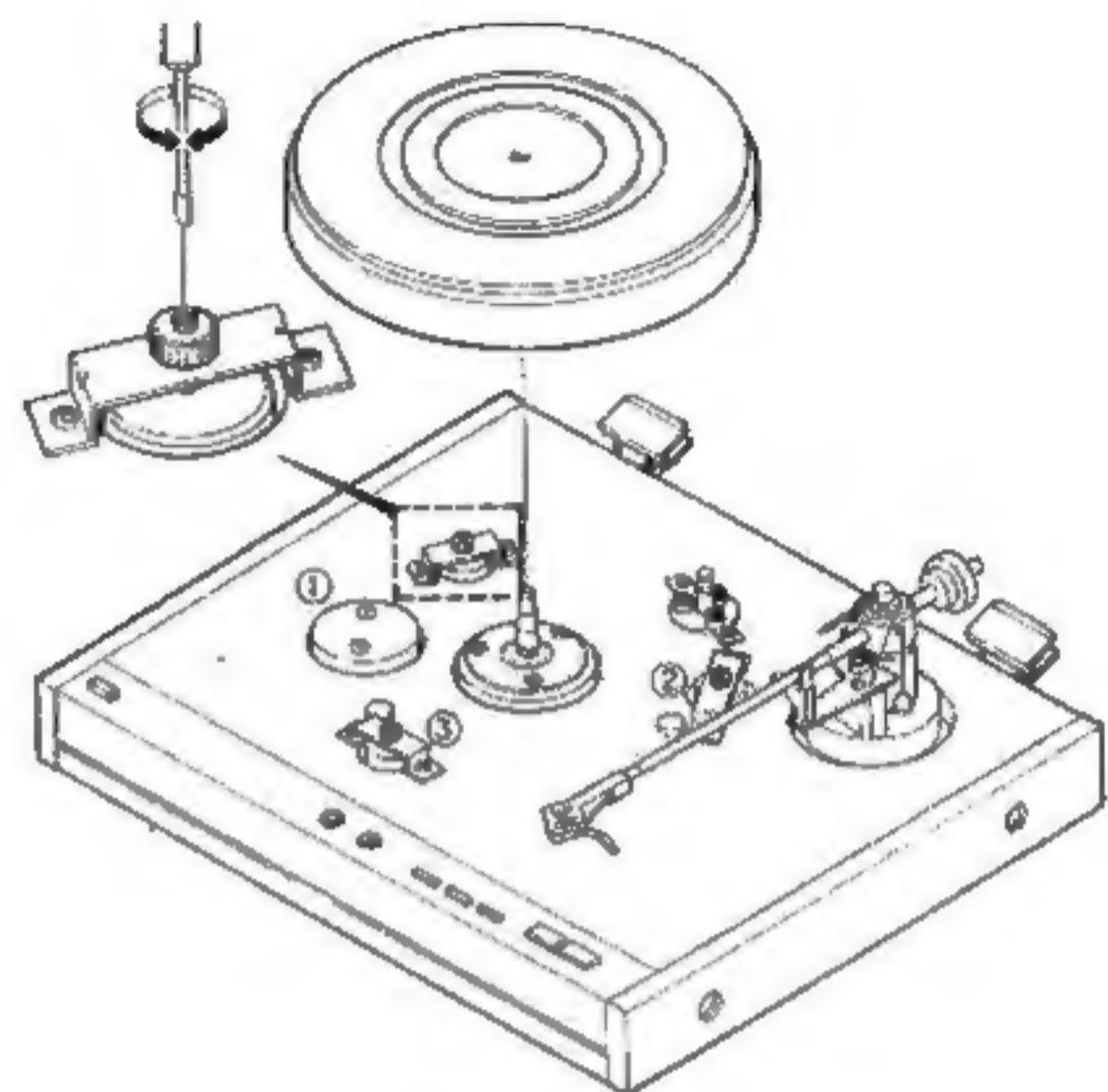
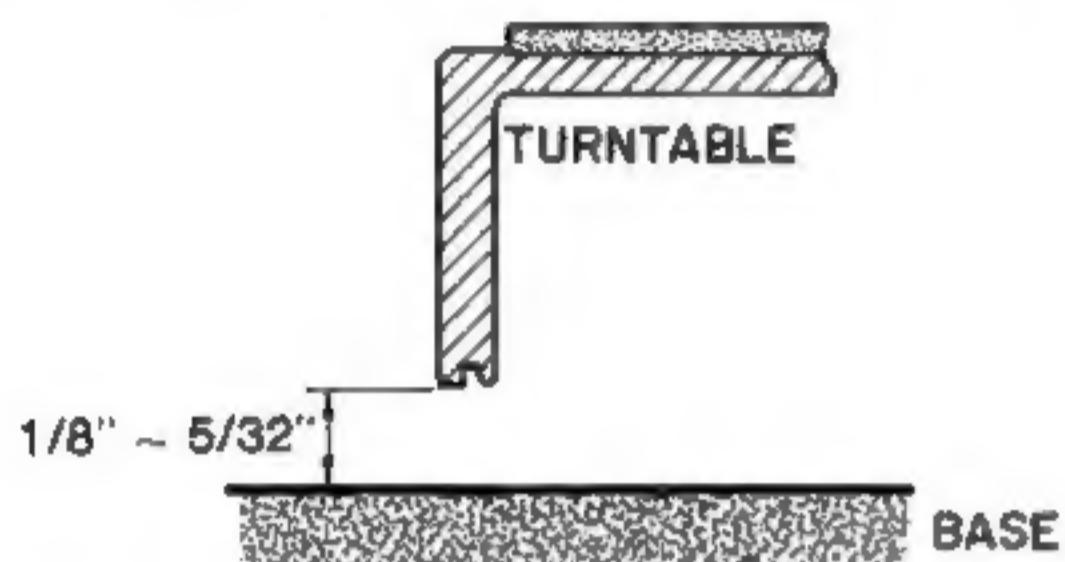


Figure-1

B. Tone arm adjustment

1. Turn the POWER switch on.
2. Put a record and the rubber mat on the turntable.
3. Push the UP/DOWN button and move the tone arm off the tone arm rest.
4. Turn the screw of the arm lift to make the distance from the stylus tip to the record $1/4''$ to $5/16''$ (6 to 7mm).

Note: Use a U-shaped screwdriver to turn the screw.

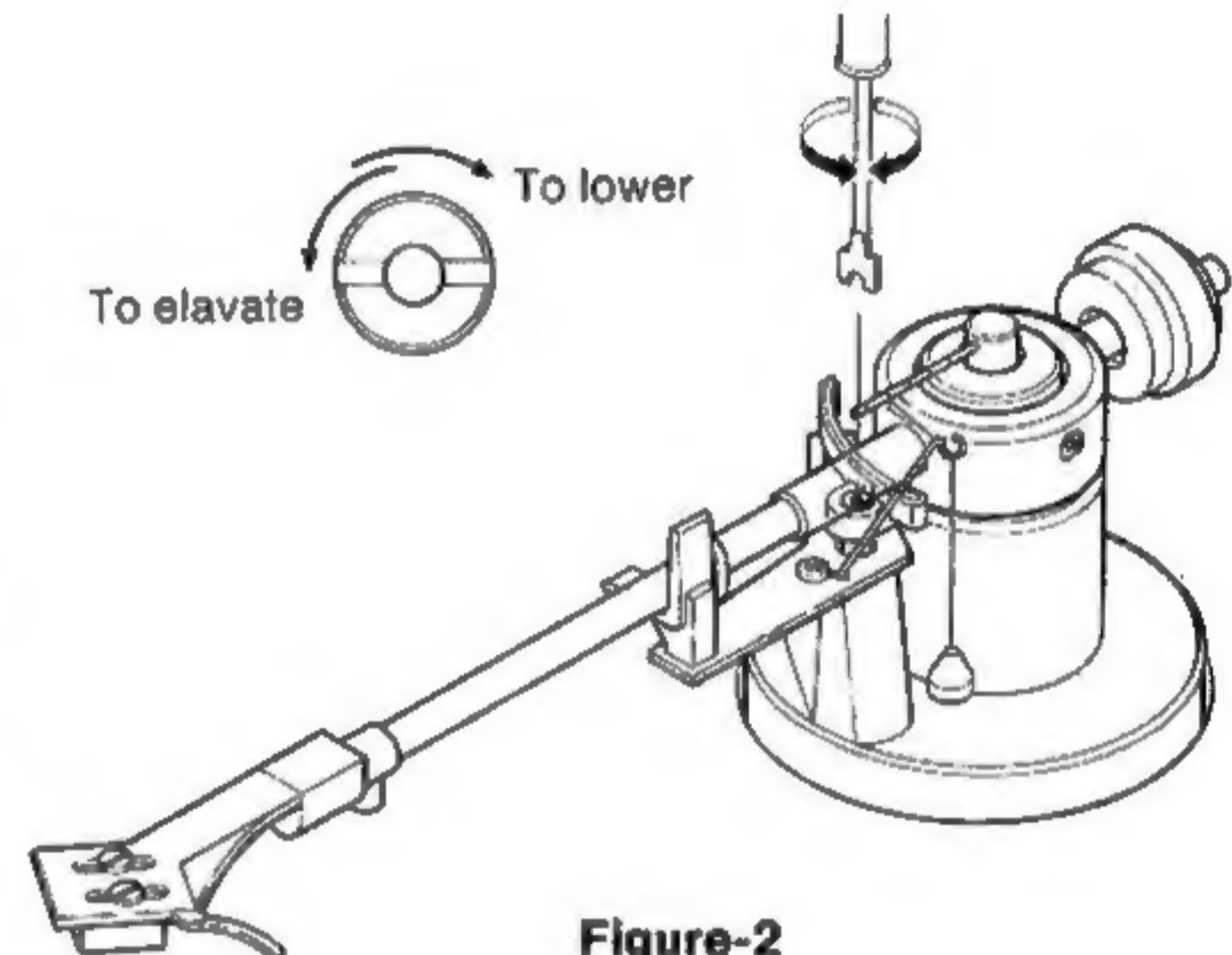


Figure-2

C. Speed adjustment

1. Remove the bottom cover.
2. Put the unit on stands as shown in figure-3. (This is to gain access to the control PWB.)
3. Turn the POWER switch on.
4. Put a record and the disc stabilizer on the turntable.
5. Set the two SPEED ADJ knobs on the front panel to 12 o'clock position.
6. Select 33 rpm and start playing the disc.
7. Adjust VR101 (PL-601) or VR103 (PL-701) on the Control PWB inside the unit for correct rotation speed by using a stroboscope.
6. Select 45 rpm speed and start playing the disc.
7. Adjust VR102 (PL-601) or VR104 (PL-701) on the Control PWB inside the unit for correct rotation speed by using a stroboscope.

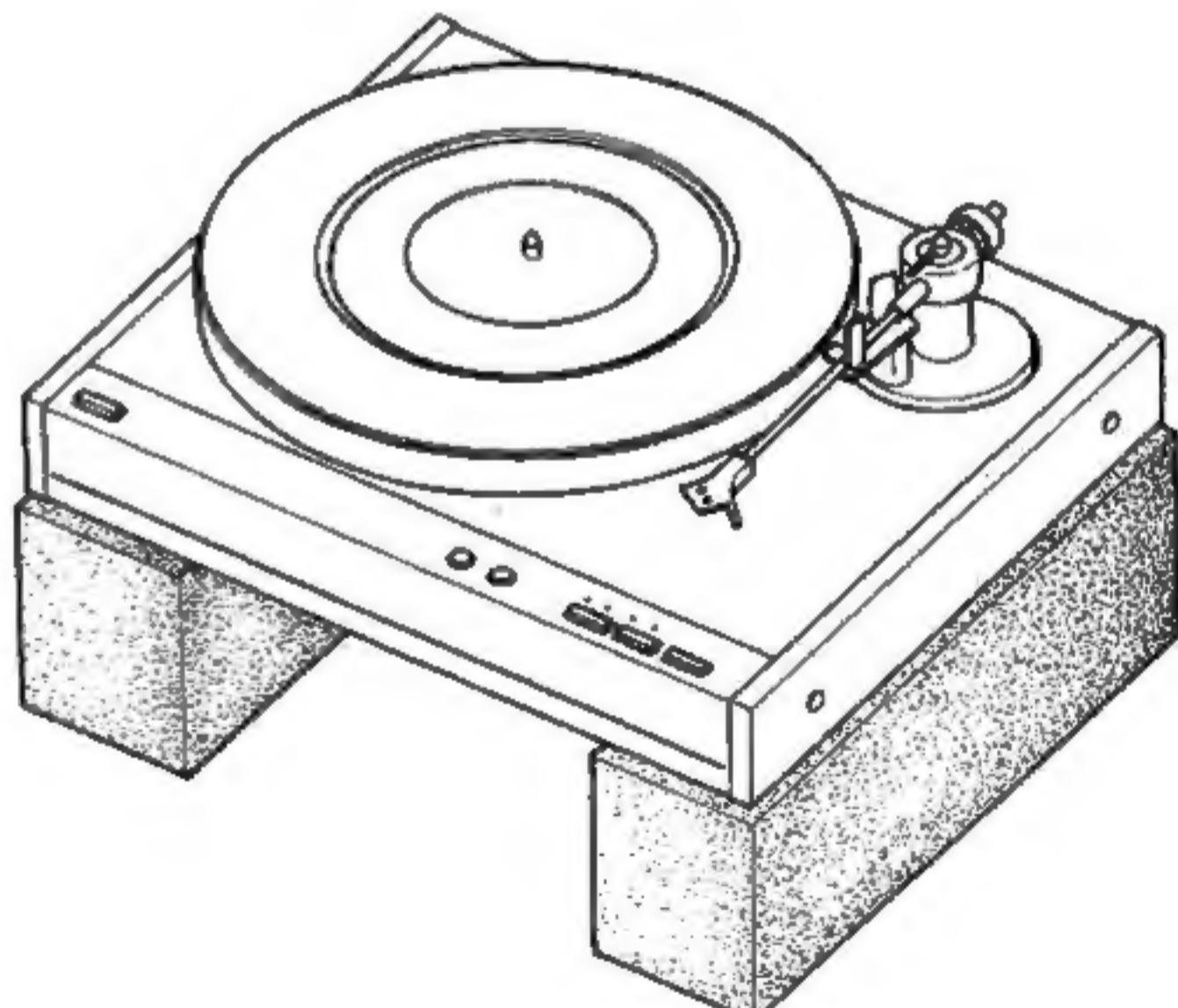


Figure-3

1. ADJUSTMENT

D. Automatic lead-in adjustment

(PL-701)

1. Set the unit to the same condition as step 1 – 3 in Speed adjustment. (Note that this adjustment can be made through a hole of the bottom cover.)
2. Put a record on the turntable.
2. Push the START button.
3. Turn the offset-screw of the tone arm base (shown in figure-4) to make the stylus tip land on the area 6-39/64" to 6-49/64" (168 to 172mm) for 7" size, 11-17/32" to 11-21/32" (292.6 to 296mm) for 12" size from the spindle of the turntable.

E. Automatic return (lift) adjustment

1. Put a record on the turntable.
2. Select 33 rpm speed and start playing. Place the tone arm on the silent end of the record.
3. Turn the offset-screw (shown in figure-4) of the tone arm base to make the tone arm returns (is lifted) in the area 3-55/64" to 4-1/16" (98 to 103.2mm) (for 7" size), 4-9/32" to 4-31/64" (108.6 to 113.8mm) (for 12" size) from the spindle of the turntable.

F. Offset voltage adjustment (PL-701)

1. Turn the POWER switch on.
2. Leave the tone arm on the rest.
3. Connect 2-pin and 7-pin of CNP104 on the Control PWB (inside the unit).
4. Adjust VR101 on the Control PWB to keep the voltage between pin-1 and pin-3 of CNP104 –0.2V to OV.
5. After completing above, open between 2-pin and 7-pin of CNP104.

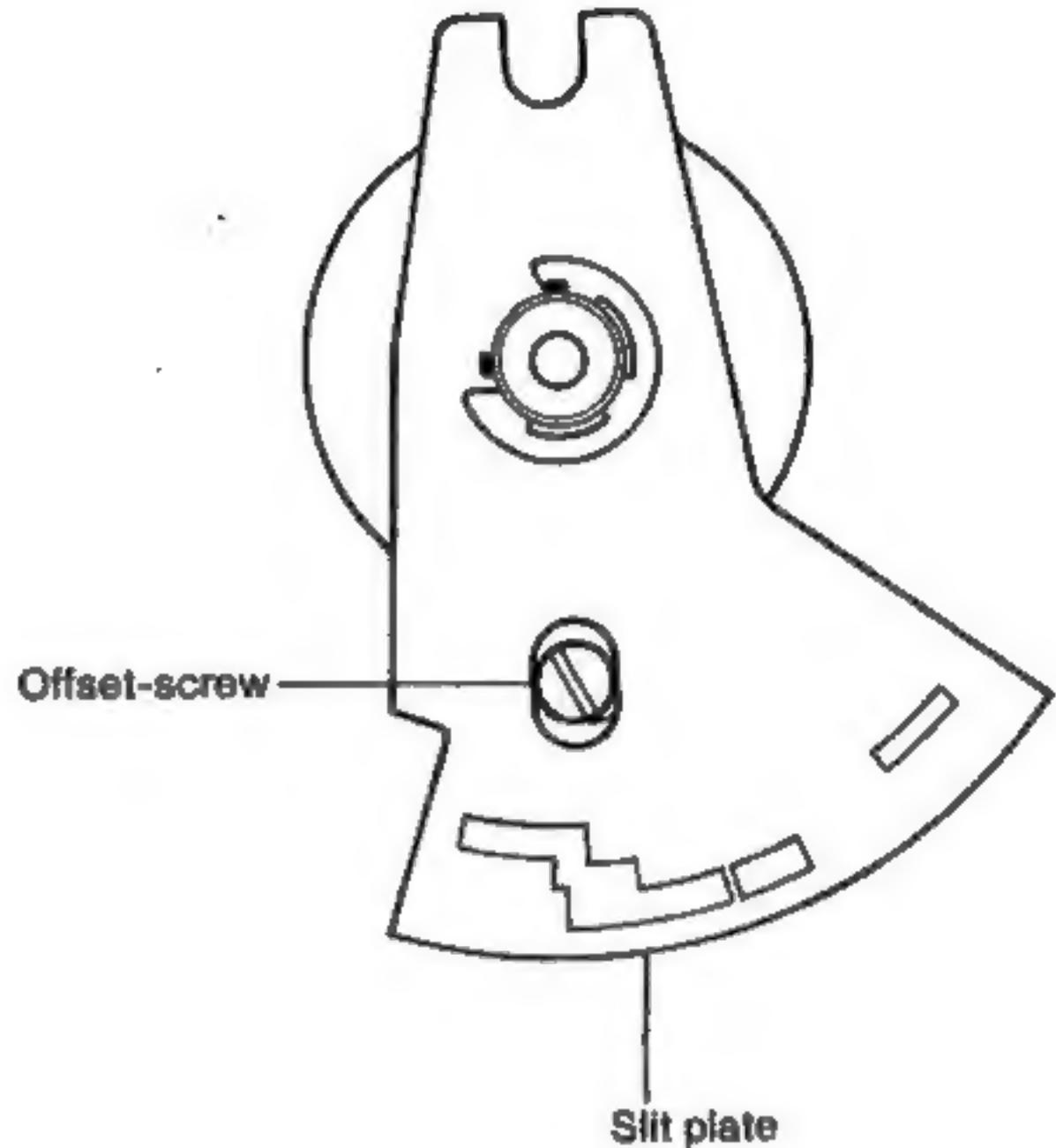
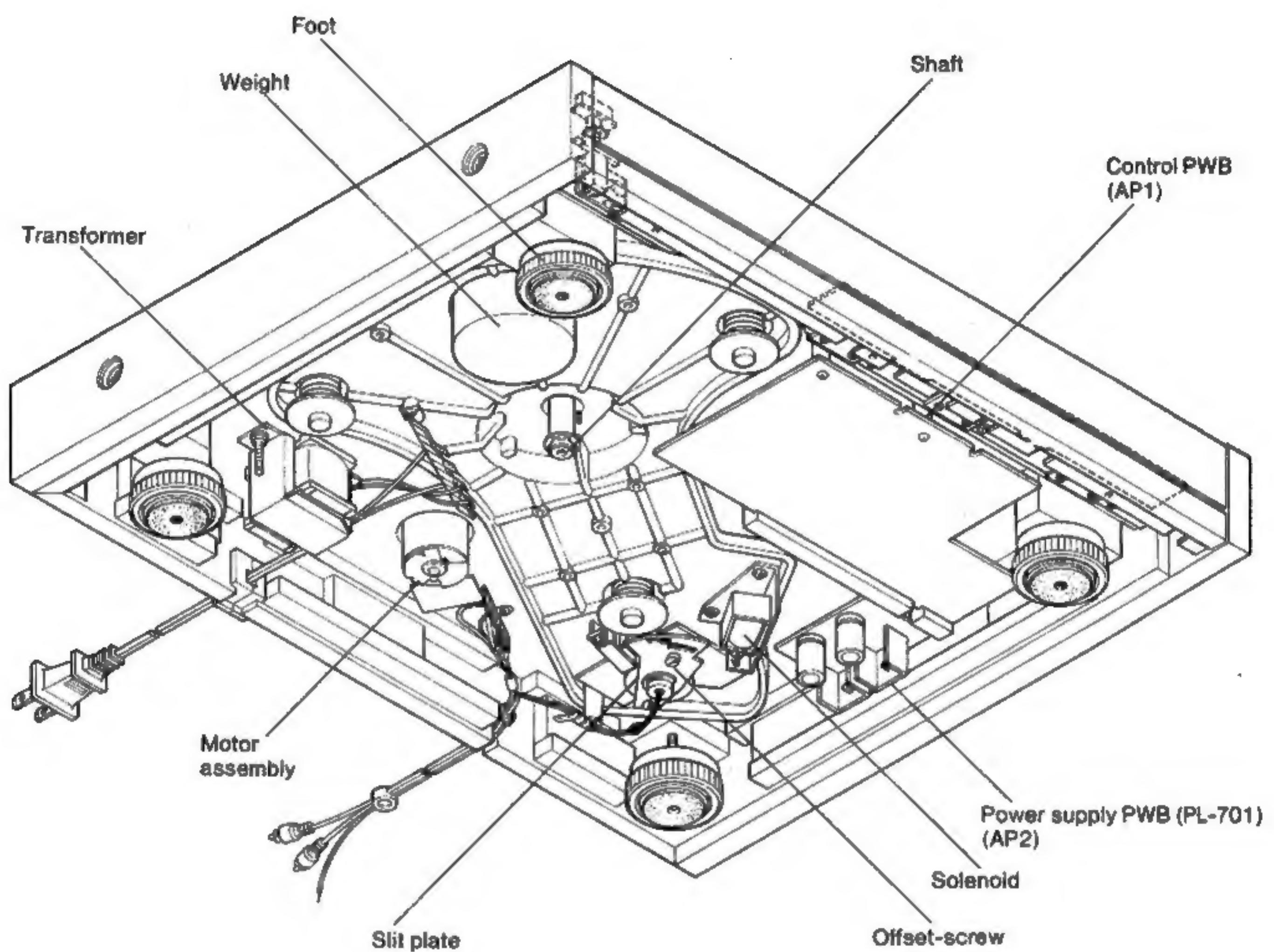
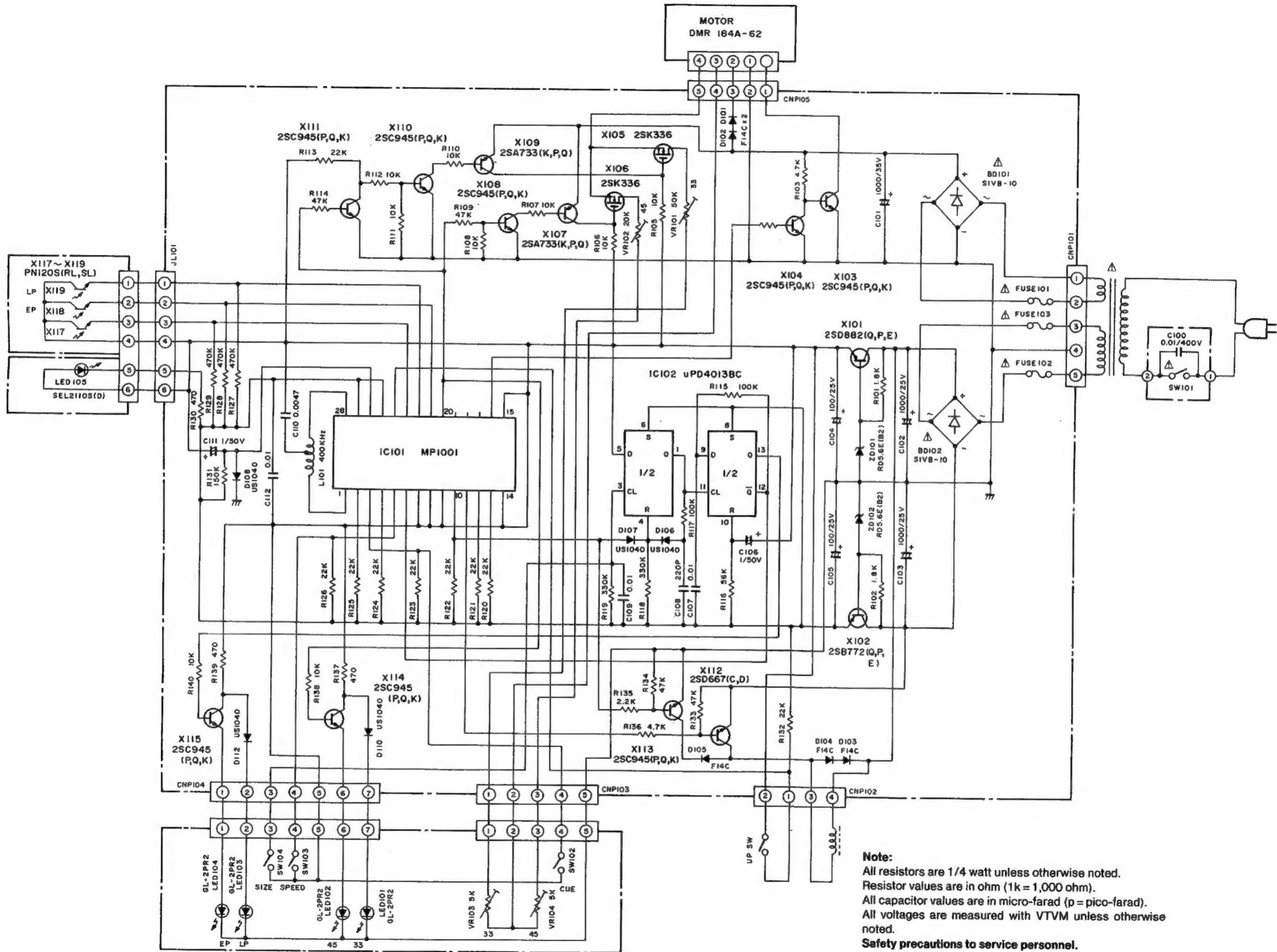


Figure-4

2. PARTS LOCATION



**Note:**

All resistors are 1/4 watt unless otherwise noted.
Resistor values are in ohm (1k = 1,000 ohm).

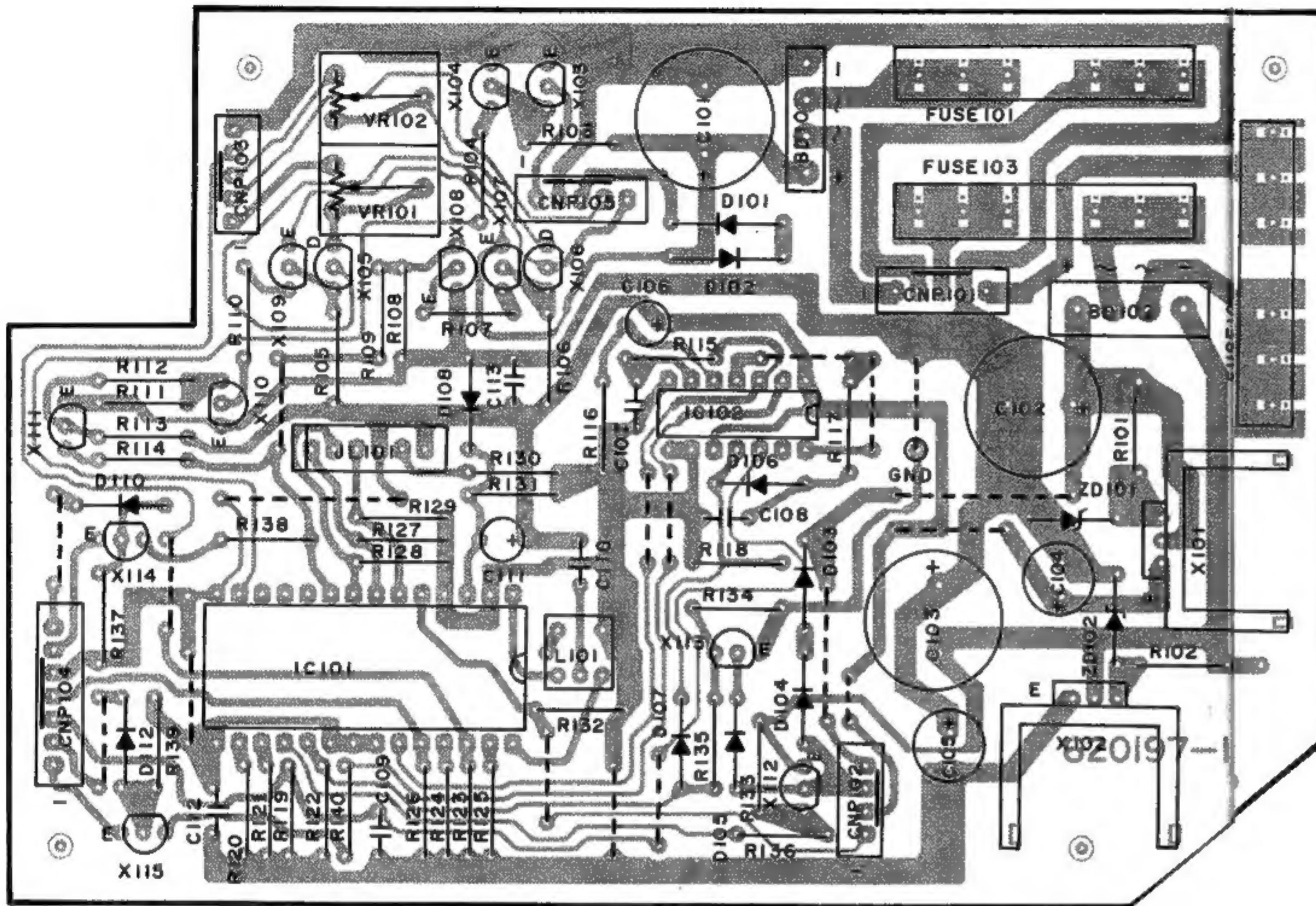
All capacitor values are in micro-farad (μ = pico-farad).
All voltages are measured with VTVM unless otherwise noted.

Safety precautions to service personnel.

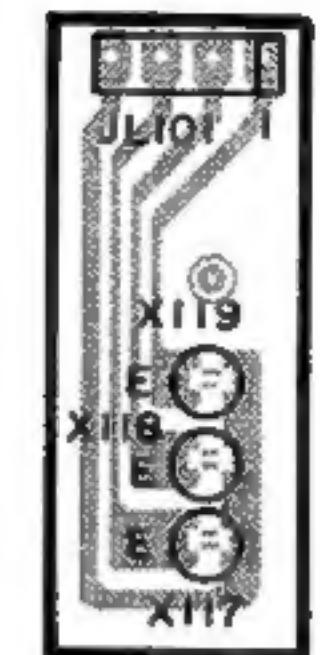
(1) Δ Safety requirement components in accordance with present safety regulations. These components must only be replaced by original components.

(2) To comply with present safety regulations, be sure to make leakage-current or resistance measurements before returning the appliance to customer.

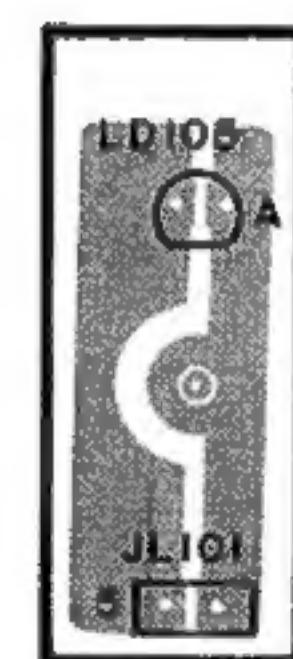
5. PW BOARDS DETAILS
(Foil side)



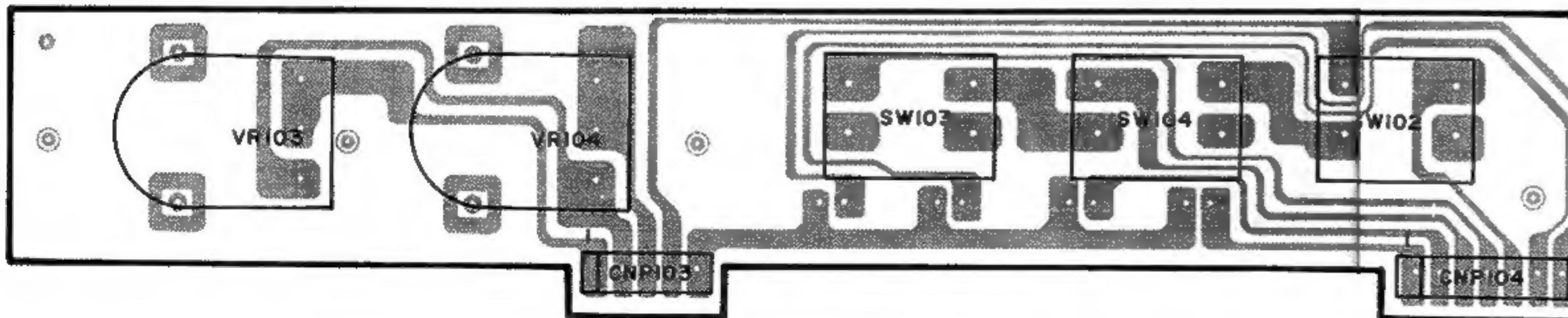
Control PWB PSCZ033COX (AP1)



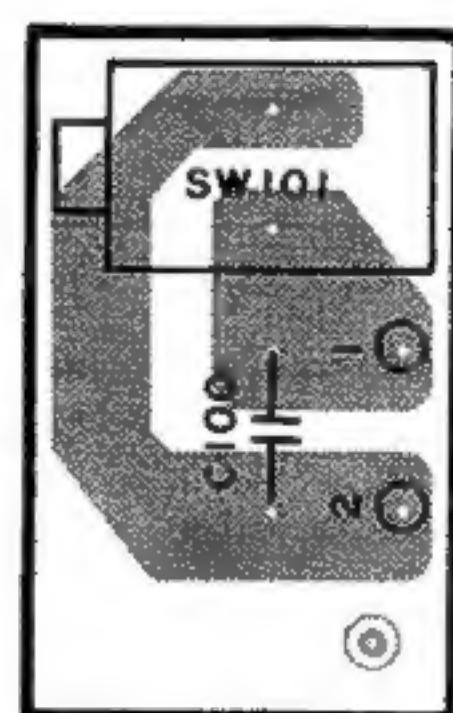
Sensor
PWB
PSZZ232COX
(AP3)



LED PWB
PSZZ233COX
(AP4)



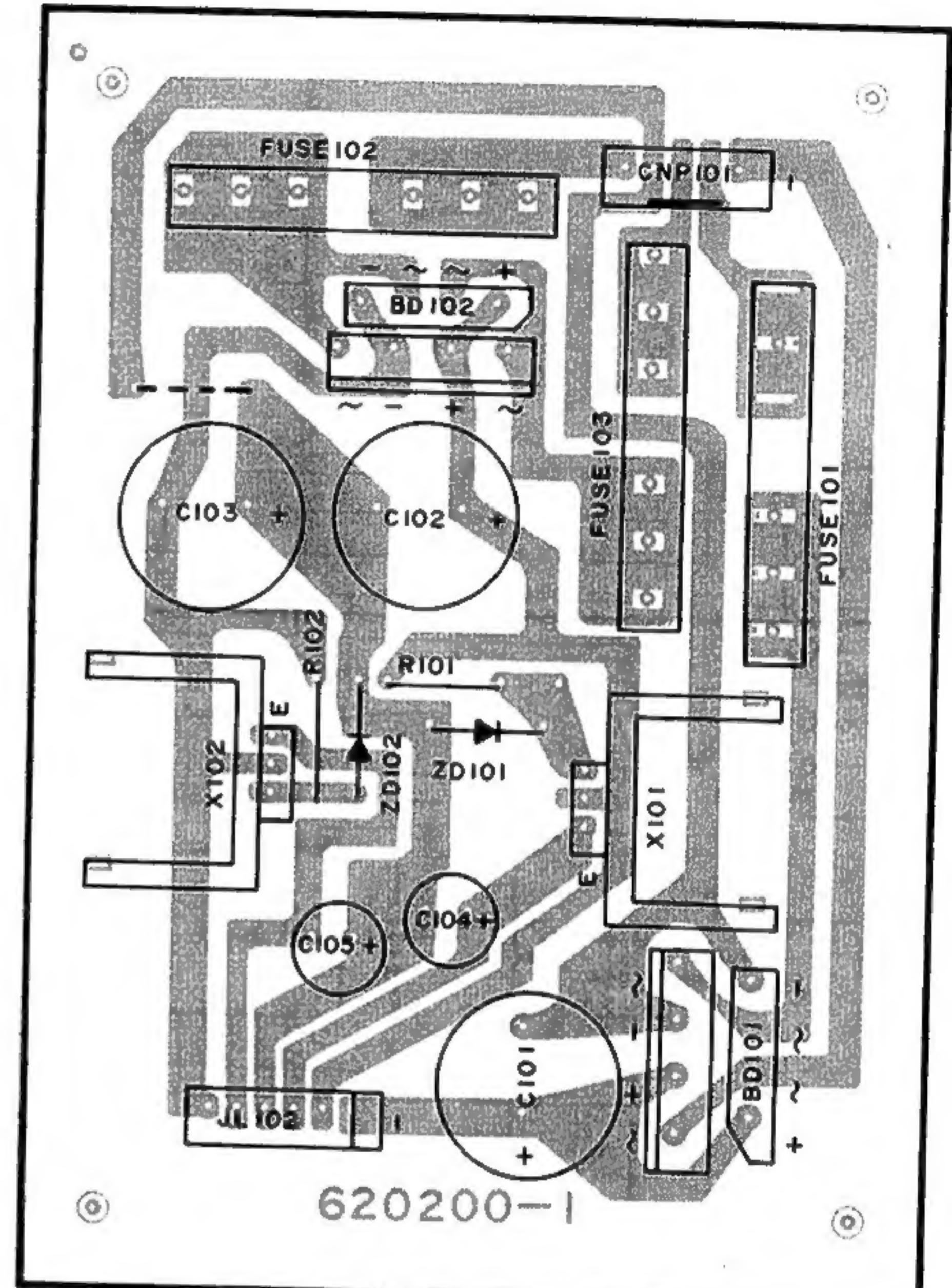
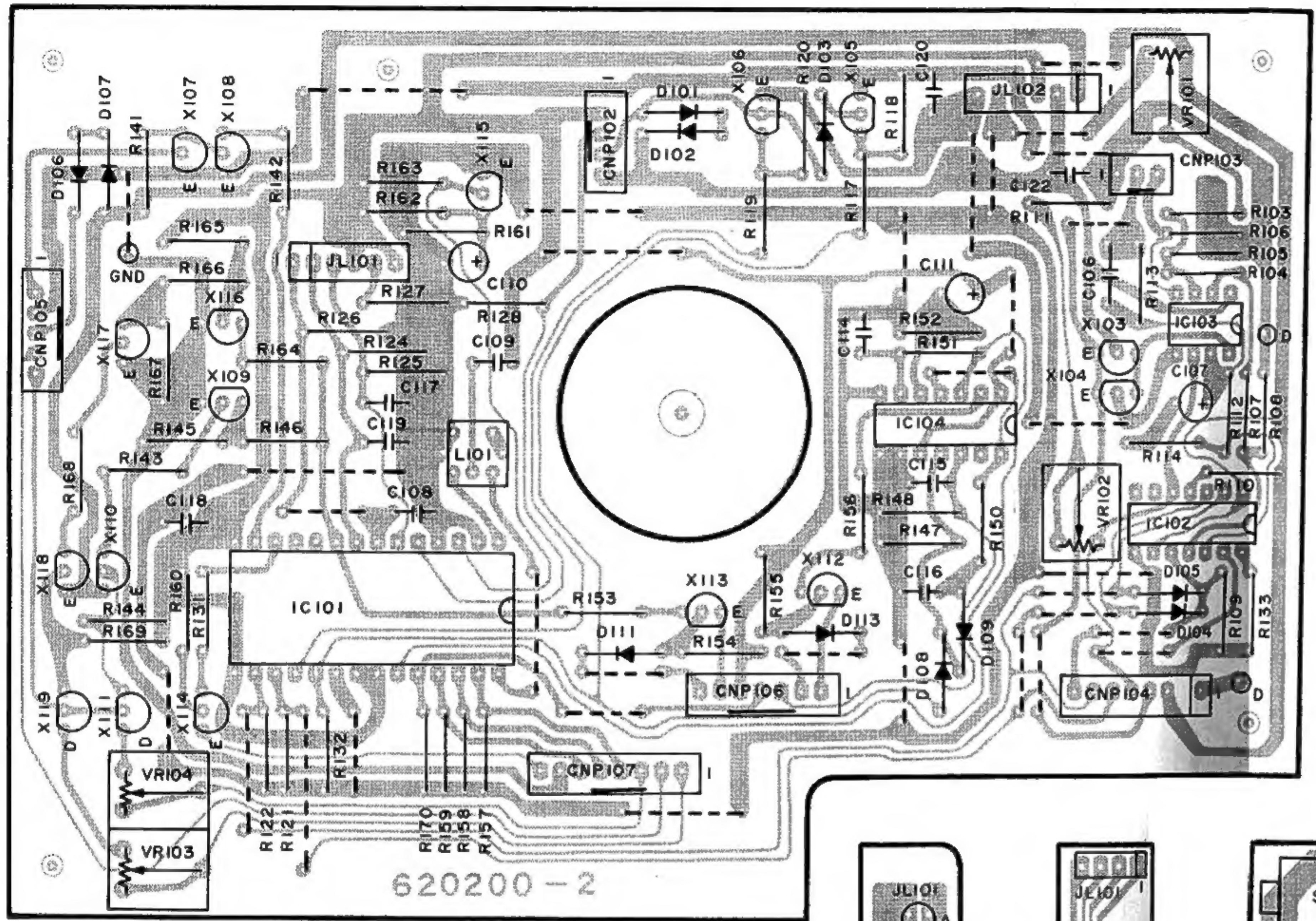
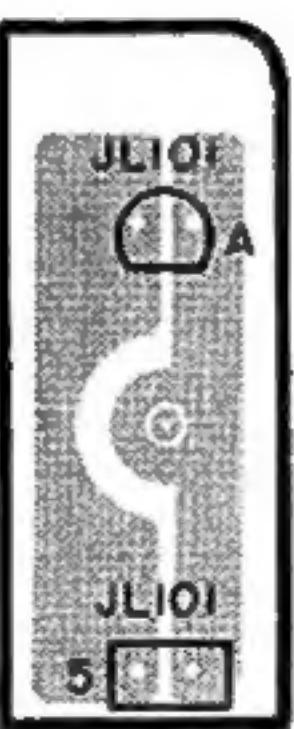
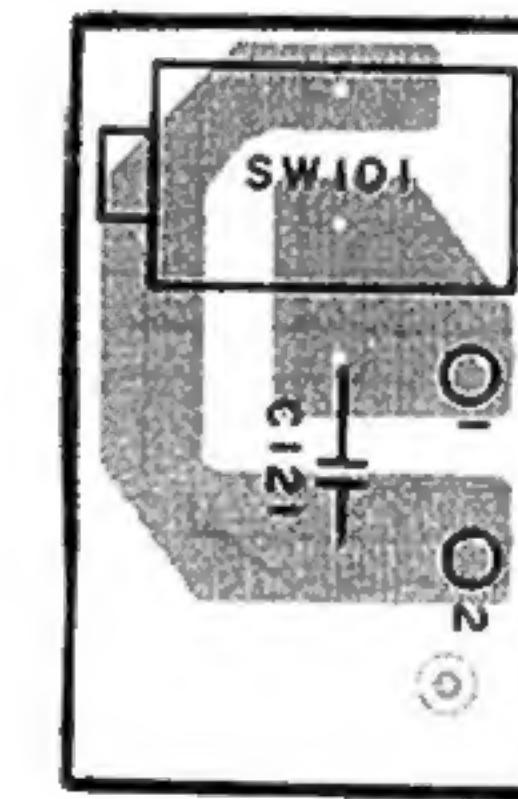
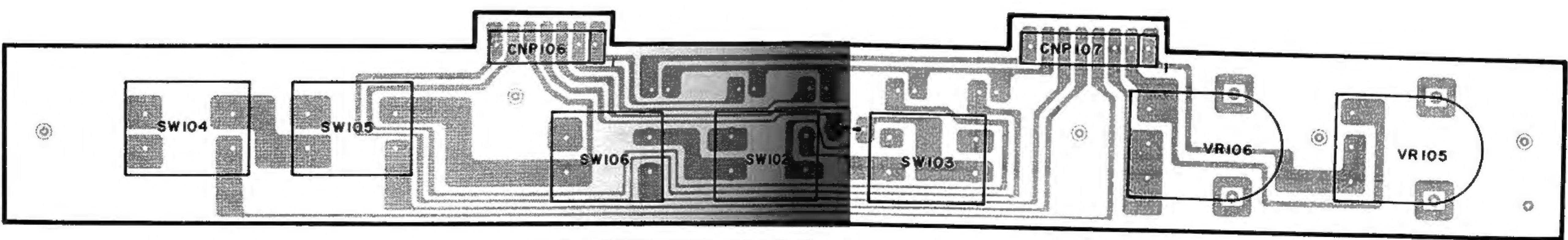
Switch PWB PSSW318COX (AP2)



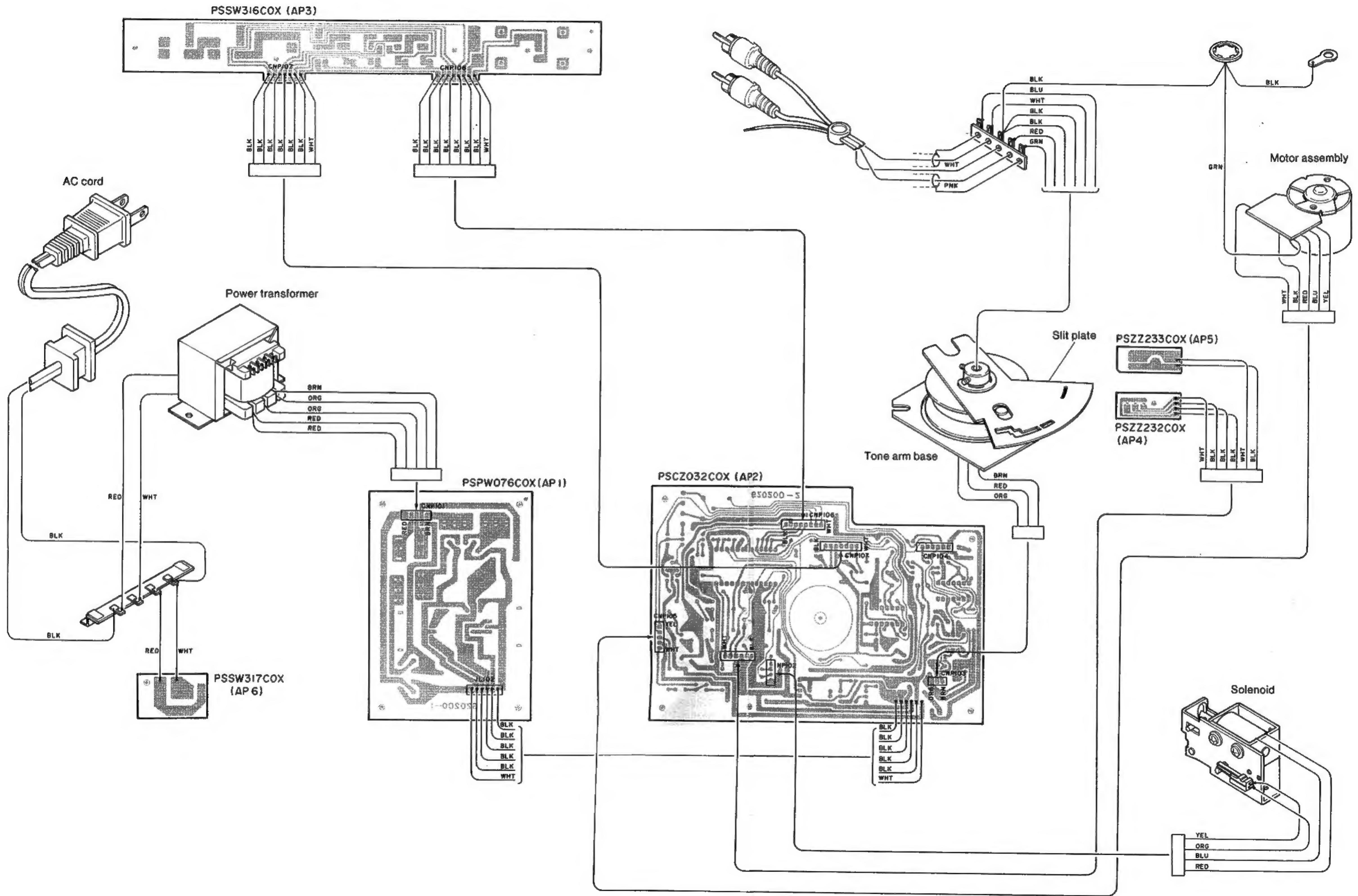
Power SW
PSSW317COX
(AP5)

8. PW BOARD DETAILS

(Foil side)

Sensor PWB
PSZZ232COX
(AP4)LED PWB
PSZZ233COX (AP5)Power SW PWB
PSSW317COX
(AP6)

9. WIRING DIAGRAM



11. PARTS LIST

AMPL 701*05 (SOLENOID ASSY)

<u>Exploded View No.</u>	<u>Part Code</u>	<u>Description</u>	<u>Exploded View No.</u>	<u>Part Code</u>	<u>Description</u>
501	ML533SD001	Angle	D109	QDSS1588XT	Diode, 1S1588
502	MW161SJ002	Spring	D110	QDSS1588XT	Diode, 1S1588
503	VX322DH001	Lever	D111	QDSS1588XT	Diode, 1S1588
504	ZSA112202Z	Solenoid	D112	QDSS1588XT	Diode, 1S1588
505	AXSH013GEA	Leaf SW Assy			
506	VS217BN002	Spacer	D121	QDSS1VBXXX	Diode, S1VB-10
			D122	QDSS1VBXXX	Diode, S1VB-10
			D131	QD75R6EB2A	Diode, Zener R05.6EB2
			D132	QD75R6EB2A	Diode, Zener R05.6EB2

AMPL 701*06 (TONE ARM ASSY)

<u>Exploded View No.</u>	<u>Part Code</u>	<u>Description</u>	<u>Exploded View No.</u>	<u>Part Code</u>	<u>Description</u>
601	VX652DH001	Head Shell	VR101	RPGMB50306	VR, 50k(B)
602	VX332AH001	Connector	VR102	RPGMB10307	VR, 1k(B)
603	VH165DH001	Screw	L101	TT0700001D	Coil, Osc, 400kHz
604	ACZZ279GEA	Arm Wire Kit	F101	ZFB10207C	Fuse, 1A
615	MM487SM001	Weight	F102	ZFB10207C	Fuse, 1A
616	VM180SB001	Ring, Counter	F103	ZFB10207C	Fuse, 1A
617	MM160CC001	IFC Weight			

MISCELLANEOUS

<u>Part Code</u>	<u>Description</u>
KTPL601-BX	Owner's Manual
KZ00049BX	Safty Instruction
AVSIBLZ001	Disc Stabilizer
VM186DB001	EP Adaptor

APSCZ033AA (AP1)

<u>Symbol No.</u>	<u>Part Code</u>	<u>Description</u>
IC101	QQPH1001AA	IC, MP1001
IC102	QQ004013A&	IC, 4066
X101	QTD0882XAA	Tr., 2SD882
X102	QTB0772XAA	Tr., 2SB772
X103	QTC0945XJA	Tr., 2SC945(P, Q)
X104	QTC0945XJA	Tr., 2SC945(P, Q)
X105	QTK0336XAC	FET, 2SK336
X106	QTK0336XAC	FET, 2SK336
X107	QTA0733XDA	Tr., 2SA733
X108	QTC0945XJA	Tr., 2SC945(P, Q)
X109	QTA0733XDA	Tr., 2SA733
X110	QTC0945XJA	Tr., 2SC945(P, Q)
X111	QTC0945XJA	Tr., 2SC945(P, Q)
X112	QTD0667AAB	Tr., 2SD667
X113	QTD0667AAB	Tr., 2SD667
X114	QTC0945XJA	Tr., 2SC945(P, Q)
X115	QTC0945XJA	Tr., 2SC945(P, Q)

<u>Symbol No.</u>	<u>Part Code</u>	<u>Description</u>
D101	QDSF14CXXA	Diode, F14C
D102	QDSF14CXXA	Diode, F14C
D103	QDSF14CXXA	Diode, F14C
D104	QDSF14CXXA	Diode, F14C
D105	QDSF14CXXA	Diode, F14C
D106	QDSS1588XT	Diode, 1S1588
D107	QDSS1588XT	Diode, 1S1588
D108	QDSS1588XT	Diode, 1S1588

APSSW318AA (AP2)

<u>Symbol No.</u>	<u>Part Code</u>	<u>Description</u>
VR105	RVMA502B06	VR, 5k, 33
VR106	RVMA502B06	VR, 5k, 45
SW102	SK0101X37A	SW, UP/DOWN
SW103	SK0101X37A	SW, SPEED
SW104	SK0101X37A	SW, SIZE

LD101 QIA2PR2XX3 LED, GL-2PR2

LD102 QIA2PR2XX3 LED, GI-2PR2

LD103 QIA2PR2XX3 LLD, GI-2PR2

LD104 QIA2PR2XX3 LED, GI-2PR2

Symbol No. **Part Code** **Description**
X117 QTP0120AN Photo Tr., PN120S

X118 QTP0120AN Photo Tr., PN120S

X119 QTP0120AN Photo Tr., PN120S

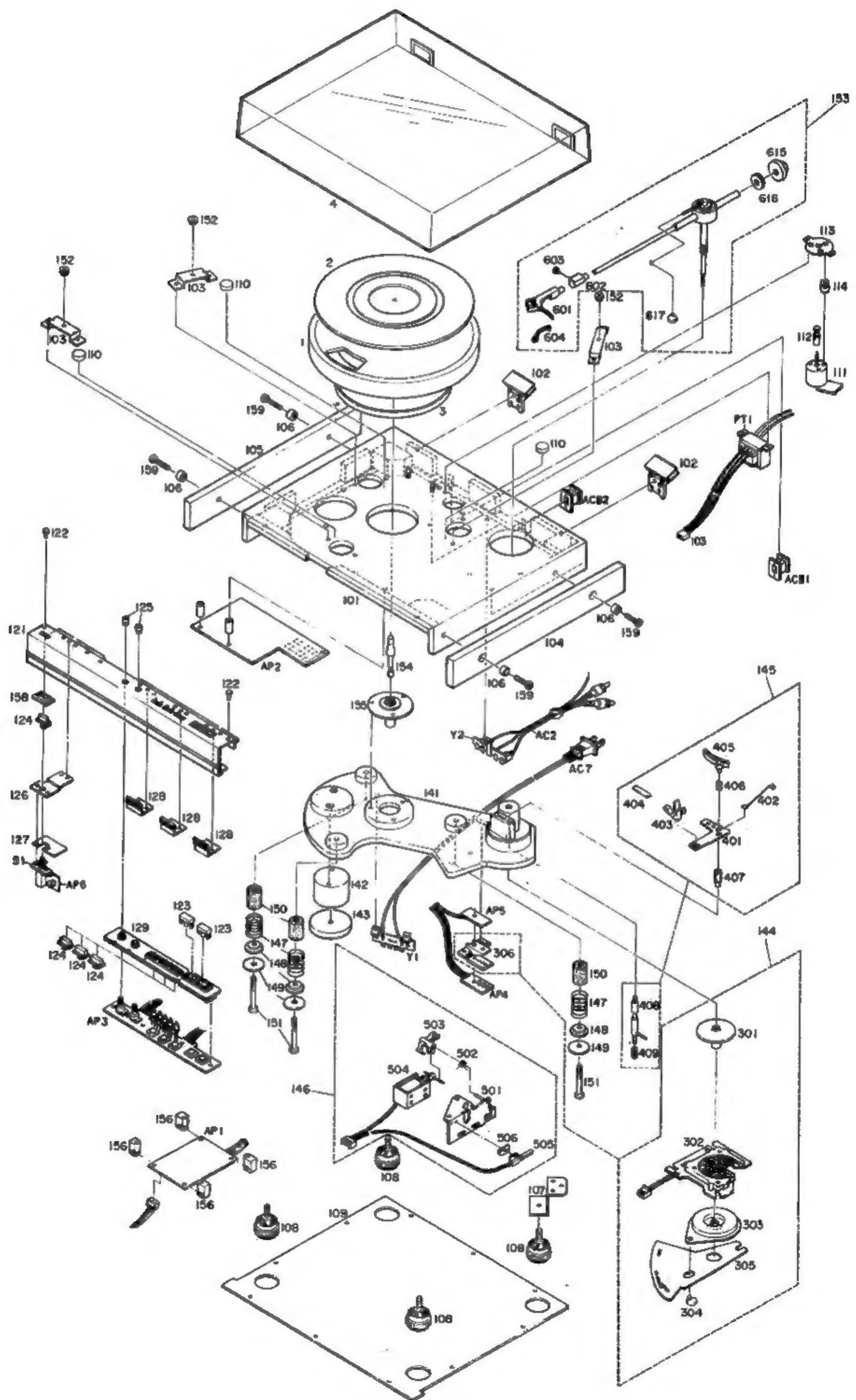
APSZZ233AA (AP4)

<u>Symbol No.</u>	<u>Part Code</u>	<u>Description</u>
LD105	QLAS2110SD	LED, SFL2110S(D)

APSSW317AA (AP6)
Symbol No. **Part Code** **Description**
S1 SP01AAU23A SW, Power

C100 CKDU103PGM Ceramic, 0.01mF

12. EXPLODED VIEW



13. PARTS LIST

ME

APSSW316AA (AP3)

Expl
View

	<u>Symbol No.</u>	<u>Part Code</u>	<u>Description</u>
1	VR105	RVMA502B06	VR, 33, 50k
2	VR106	RVMA502B06	VR, 45, 50k
3	S102	SK0101X37A	SW, Size
4	S103	SK0101X37A	SW, Speed
101	S104	SK0101X37A	SW, Start
102	S105	SK0101X37A	SW, Up
103	S106	SK0101X37A	SW, Repeat
104	LD102	QLA2PR2XX3	LED, 17
105	LD103	QLA2PR2XX3	LED, 30
106	LD104	QLA2PR2XX3	LED, 45
107	LD105	QLA2PR2XX3	LED, 33
108	LD106	QLA2PR2XX3	LED, Repeat
109	L101	TT0700001D	Coil, Osc, 400kHz

110

APSZZ232AA (AP4)

111

112

113

114

Symbol No. Part Code Description

121

X117	QTP0120AN	Photo Tr., PN120S
X118	QTP0120AN	Photo Tr., PN120S
X119	QTP0120AN	Photo Tr., PN120S

122

123

124

125

126

APSAA233AA (AP5)

127

128

129

Symbol No. Part Code Description

LD105	QLAS2110SD	LED, SEL2110S(D)
-------	------------	------------------

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

APSSW317AA (AP6)

Symbol No. Part Code Description

S1	SP01AAU23A	SW, Power
C100	CKDU103PGH	Ceramic, 0.01MF

KYOCERA International Inc.

7 Powder Horn Drive, Warren, NJ 07060-0227 (201-560-0060)

YASHICA Kyocera GmbH

Eiffestrasse 76, D-2000 Hamburg 26, West Germany (040) 251507-0